

1-GATEWAY  
09/025,143REMARKS

This amendment is in response to the office action of 2/11/04, the examiner's supplemental office action dated 4/6/04, and further in view of the interviews of 06/02/04 and 07/14/04. Applicant is appreciative of the courteous and professional manner in which the interview was conducted by the examiner. Applicant is also appreciative for the recognized allowable subject matter (claim 23). This amendment should obviate outstanding issues and make the remaining claims allowable. Reconsideration of this application is respectfully requested in view of the foregoing amendment and the remarks that follow.

STATUS OF CLAIMS

Claims 23-35 are pending.

Claims 23 is allowed.

Claims 25-33 stand rejected under 35 USC § 101 for constituting functional descriptive material that is non-statutory.

Claims 26-35 stand rejected under 35 USC § 112, first paragraph, as containing subject matter which was not described in the specification.

Claims 26, 30, 34 and 35 stand rejected under 35 USC § 103(a) as being unpatentable over Purtilo et al. ("Module Reuse by Interface Adaption") in view of Gamma et al. ("Design Patterns: Elements of Reusable Object-oriented Software").

Claims 24, 27-29 and 31-33 stand rejected under 35 USC § 103(a) as being unpatentable over Purtilo et al. in view of Gamma et al. as applied to claims 26 and 30 and further in view of author admitted prior art.

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### OVERVIEW OF CLAIMED INVENTION

The presently claimed invention provides for a system and method for encapsulating object definition information in a first notation in encapsulator objects defined at least in part in a second, typically different notation. The encapsulator objects expose native interfaces that may be interrogated to discover the foreign object definition information they encapsulate. The present invention provides for instantiating one or more objects corresponding to an interface associated with a target object (with the target object's interface being defined in a first notation), wherein each of the objects has an interface defined in a second notation which is statically acquired by an invoker. It should be noted that object invocation is performed without run-time discovery of interfaces. The present invention also facilitates a calling object to call the target object by invoking the objects defined in the second notation without the calling object having to discover any interfaces at run-time.

### OBJECTIONS/REJECTIONS UNDER 35 U.S.C. §112

The examiner has objected to the specification under 35 U.S.C. §112, first paragraph, as failing to adequately teach the claimed limitations. The examiner has also rejected claims 25-35 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification. As per examiner's suggestions in the interviews of 06/02/04, a proposed amendment was submitted on 07/07/04, wherein independent claims 23-25 were amended to overcome the objections/rejections under 35 U.S.C. § 112. In the interview of 07/14/04, the examiner and the applicant's representative agreed that the amended claims overcame the 35 U.S.C. §112 objections/rejections with respect to claims 25-33.

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09/025,143REJECTIONS UNDER 35 U.S.C. §103(a)

The examiner has rejected claims 26, 30, 34, and 35 as being unpatentable over Purtilo et al. ("Module Reuse by Interface Adaption") in view of Gamma et al. ("Design Patterns: Elements of Reusable Object-Oriented Software", pp. 87-96, 129-150). Claims 24, 27-29 and 31-33 stand rejected under 35 USC § 103(a) as being unpatentable over Purtilo et al. in view of Gamma et al. as applied to claims 26 and 30 and further in view of author admitted prior art. Applicant respectfully disagrees with the Examiner with regard to the rejection of claims 24, 26-35.

As mentioned in the interviews of 06/02/04 and 07/14/04, currently cancelled claims 19 and 21 were originally allowed in the office action of 08/11/2003. Claims 19 and 21 were cancelled and rewritten in clean form as claims 24 and 25 and presented in the RCE filed on 12/11/03. The examiner, in the interview of 06/02/04, indicated that minor inconsistencies need to be corrected with respect to the claims and that claims 24 and 25 would be allowable after such corrections. In the subsequent interview of 07/14/04, the examiner indicated that claims 24 and 25 were in condition for allowance.

Applicant has amended independent claims 26, 30, 34, and 35 as per examiner's suggestion. Claims 26 and 34 have been amended to recite an interface defined in a second notation that is statically acquired by an invoker (see page 1, lines 31-35 of the application-as-filed), whereby object invocation is performed without run-time discovery of interfaces (see page 7, lines 21-24 of the application-as-filed). Claims 26 and 34 have also been amended to recite that object definition information is obtained by invoking the objects without the calling object having to discover any interfaces at run-time (see page 7, lines 21-24 of the application-as-filed).

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Similarly, claims 30 and 35 have been amended to recite an interface defined in a second notation that is statically acquired by a receiver (see page 1, lines 31-35 of the application-as-filed), whereby such reception is performed without run-time discovery of interfaces (see page 7, lines 21-24 of the application-as-filed). Claims 30 and 35 have also been amended to recite that object definition information is obtained by invoking the objects without having to discover any interfaces at run-time (see page 7, lines 21-24 of the application-as-filed). In the interview of 07/14/04, the examiner indicated that amended claims 26-35 overcame the U.S.C. §112 issues and asked applicant's representative to point out (in writing) necessary support in the specification for amendments made with respect to independent claims 26, 30, 34, and 35.

In view of the current amendment to independent claims 26, 30, 34, and 35, applicant believes that the Purtilo reference, either by itself or in combination with Gamma et al., fails to teach a method for interrogating a collection of objects with received information to determine one or more objects within the object collection that are required to construct the invocation. Applicant contends that Purtilo et al. reference merely provides for a declarative language that allows for parameters to be rearranged and transformed to match formal parameters of an interface (see page 544). Additionally, there is no motivation in either the Purtillo et al. reference or the Gamma et al reference to instantiate an object collection based upon the syntax of an object invocation, wherein an object's interface is statically acquired and object invocation being performed without run-time discovery of interfaces. Applicant also contends that there is no motivation in either the Purtillo et al. reference or the Gamma et al reference to obtain object definition information by invoking the objects without having to discover any interfaces at run-time. Applicants, therefore, contend that Purtillo and Gamma, either by themselves or in combination, fails to provide for at least the following limitations.

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Hence, in view of the interviews of 06/02/04 and 07/14/04, the amendment to independent claims 26, 30, 34, and 35, the above mentioned arguments, applicant respectfully requests the Examiner to remove the rejection with regard to claim 26 and 30, 34, and 35. Additionally, applicant contends that the above-mentioned arguments for independent claims 26 and 30 substantially apply to dependent claims 27-29 and 31-33. Therefore, the examiner is hereby respectfully requested to withdraw the rejections and reconsider dependent claims 27-29 and 31-33 as they inherit the limitations of the claims from which they depend from.

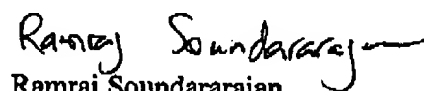
### SUMMARY

As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicant's presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

A petition for a one-month extension of time is being filed with this amendment. However, the Commissioner is hereby authorized to charge any deficiencies in the fees provided or to credit any overpayment to Deposit Account No. 12-0010.

If it is felt that an additional interview would expedite prosecution of this application, please do not hesitate to contact applicant's representative at the below number.

Respectfully submitted,

  
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